

STATE OF COLORADO

(b) (7)(C), (b) (6) Governor
MD, MPH
Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Laboratory Services Division
Denver, Colorado 80246-1530 8100 Lowry Blvd.
Phone (303) 692-2000 Denver, Colorado 80230-6928
Located in Glendale, Colorado (303) 692-3090
<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

February 11, 2011

(b) (7)(C), (b) (6) Environmental Health and Safety Manager
Abound Solar
9586 I-25 East Frontage Road
Longmont, CO 80504

RE: Inspection Report for the February 3, 2011 Compliance Inspection
EPA ID Number COR000220137

On February 3, 2011 (b) (7)(C), (b) (6) U.S. EPA and I conducted a compliance evaluation inspection at Abound Solar. This routine inspection was conducted to evaluate your compliance with the Colorado Hazardous Waste Regulations (6 CCR 1007-3). Based upon our observations at the time of that inspection it appears that you are operating in compliance with the requirements for a large quantity generator of hazardous waste.

The Division is hereby closing the referenced Compliance Advisory and does not intend to take action on this matter.

Please feel free to contact me at (b) (7)(C), (b) (6) if you have any questions regarding this matter.

Sincerely,

(b) (7)(C), (b) (6)

Hazardous Waste Compliance Unit

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Hazardous Waste Inspection Report
for a
Large Quantity Generator



ABOUND SOLAR

GENERAL INFORMATION

Facility: Abound Solar

Facility Address: 9586 I-25 East Frontage Road, Longmont, Weld County, CO 80504

EPA ID Number: COR000220137

Notification: Large Quantity Generator

Date: February 3, 2011

Generator Status: On the date of this inspection the facility was both notified and operating as a large quantity generator of hazardous waste.

PREARRANGED: Yes	TIME IN: 8:45 am	TIME OUT: 1:30 pm
FACILITY CONTACT & TITLE: (b) (7)(C), (b) (6) Environmental Health and Safety Engineer		
PARTICIPANTS: <ul style="list-style-type: none">Abound Solar<ul style="list-style-type: none">(b) (7)(C), (b) (6) Environmental Health and Safety Engineer(b) (6) Environmental Health and Safety Specialist, Abound SolarColorado Department of Public Health and Environment<ul style="list-style-type: none">(b) (7)(C), (b) (6) Compliance/Enforcement OfficerU.S. Environmental Protection Agency<ul style="list-style-type: none">(b) (7)(C), (b) (6) Environmental Protection Specialist		
FACILITY PHONE NUMBER: (303) 682-6118		
PRODUCT OR SERVICE: This facility manufactures solar panels.		
FACILITY START DATE: <p>The facility started in 2007 in Fort Collins, Colorado. It has been at this Longmont location under the name AVA Solar since 2008. The facility changed its name to Abound Solar in April 2009.</p>		NUMBER OF EMPLOYEES: <p>There are 200 employees at this facility working four shifts. The facility operates four shifts, 24 hours a day, seven days a week.</p>

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Hazardous Waste Inspection Report
for a
Large Quantity Generator



Results of Previous Inspections

The first inspection at this facility was conducted on March 2, 2010. At that time a Compliance Advisory was issued for deficiencies with the Colorado Hazardous Waste Regulations. The facility corrected the issues and responded with a written response on March 25, 2010. Based upon a review of that response, the Division closed the Compliance Advisory and did not take further action on the matter.

FACILITY INSPECTION

At approximately 8:10 a.m. on the morning of February 3, 2011 inspectors (b) (7)(C), (b) (6) from the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) and (b) (7)(C), (b) (6) from the Environmental Protection Agency (EPA) arrived at Abound Solar to conduct a Colorado compliance evaluation inspection/EPA oversight inspection. Upon arrival at the facility, the inspectors met (b) (7)(C), (b) (6) Environmental Health and Safety Engineer and (b) (7)(C), (b) (7)(C), Environmental Health and Safety Specialist from Abound Solar. At that time, the inspectors presented their identification and credentials and a brief opening conference was held.

Following the opening conference, (b) (7)(C), (b) (6) and (b) (7)(C) accompanied the inspectors on a tour of the facility and associated waste generation accumulation and storage locations. The facility has established three 90-day storage areas and several satellites accumulation areas. One satellite accumulation area was not inspected. The area was an accumulation area called "Longmont 1" located on the east wall of the regulated areas. Because all other satellites were found to be in compliance with the satellite container requirements, the inspectors determined it was likely this area was also in compliance.

After the tour the following documents were reviewed: manifests and land disposal restriction notifications since the date of the last inspection (March 2010); weekly inspection logs for satellite containers; training records; hazardous waste job descriptions; and the facility's contingency plan.

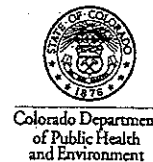
Following the site tour a closeout meeting was conducted with (b) (7)(C), (b) (6) and (b) (7)(C). The closeout meeting consisted of a review of the inspection results and the inspectors providing written guidance materials to the facility representatives. The inspectors concluded their inspection at approximately 11:15 p.m.

Colorado Compliance Evaluation Inspection/EPA Oversight Inspection

Section 3006(b) of the Resource Conservation and Recovery Act (RCRA) of 1976 (as amended), provides that any State may make application to the U.S. Environmental Protection Agency (EPA) to administer and enforce the hazardous waste program. Further, EPA shall authorize a State to carry out its program in lieu of the Federal program if it can demonstrate that its program is equivalent (or more stringent) and consistent with the Federal program and it provides adequate enforcement of compliance with the requirements.

Colorado passed state laws governing hazardous waste in 1981 and has since adopted regulations that cover hazardous waste management in the state. EPA authorized the Colorado Department of Public and Environment (the Department) to implement the federal hazardous waste program in 1984.

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The 1988 RCRA Implementation Plan states that EPA must assess the States' performance and progress in implementing quality RCRA programs. Oversight inspections ensure the quality of Colorado inspections and can include joint inspections and/or EPA inspections. The compliance evaluation inspection at Abound Solar on February 3, 2011 was conducted as a joint state compliance evaluation inspection and an EPA oversight inspection.

Manufacturing Processes

The facility, which has operated from this location since 2008, provides a continuous, automated manufacturing process for solar panels using glass coating with a cadmium telluride thin film. They utilize an automated, dry deposition process. However, due to the proprietary nature of the technologies used at this facility, processes will not be discussed in this report.

Process Changes

In July 2010 the facility installed a wastewater treatment unit. However, due to pH problems and trouble with the monitoring system, the system was taken off-line in September 2010. The monitoring system was upgraded in December 2010. On the day of the inspection, they were in the process of installing a new pH monitoring system. Therefore, the facility was not operating a waste water treatment unit on the day of the inspection.

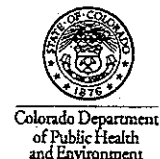
Hazardous Waste Streams

The following hazardous waste streams and associated waste codes were identified during the inspection of this facility:

1. Broken glass – D006
2. Personal Protective Equipment (PPE) – D006
3. Rinse Waters – D006
 - Facility personnel stated that the waste water does not exhibit the toxicity characteristic for cadmium using the toxicity characteristic leaching procedure (TCLP) method 1311. However, because their waste water treatment unit is not in service yet, and the rinse water must have the metals precipitated out prior to disposal in the publicly owned treatment works (POTW), they have chosen to dispose of the rinse water as hazardous waste at this time.
4. Rags – D001
 - Facility personnel stated that, although the rags are not hazardous waste (they are not capable of spontaneous ignition, and if ignited they would not burn vigorously and persistently) they are conservatively being managed and disposed of as hazardous waste, nonetheless.

All hazardous waste is disposed of off-site at Clean Harbors in Deer Trail, Colorado or Kimball, NE, which are permitted Treatment, Storage and Disposal Facilities (TSDF).

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Publicly Owned Treatment Works (POTW)

The POTW is Saint Vrain Sanitation District. Currently the facility is shipping off all waste water and there is no discharge to the sanitation district.

Air Pollutant Emission Notice

The Construction Permit Unit of the Air Pollution Prevention Division at the Department issues construction permits, also known as air pollutant emissions notices (APENs) to commercial and industrial air pollution sources in Colorado in order to ensure compliance with air quality regulations. The regulations are designed to protect the public's health and welfare and to maintain ambient air quality standards. Abound Solar has obtained an APEN number, notifying as a minor source of air pollution.

Emergency Response Coordinator

The Emergency Response Coordinator for the facility is (b) (7)(C), (b) (6) with (b) (7)(C), (b) (6) acting as an alternate. Additionally, the facility has a number of individuals established who serve on their internal emergency response team.

Hazardous Waste Accumulation Areas (SAA)

Accompanied by (b) (7)(C), (b) (6) and (b) (7)(C), (b) (6) the inspectors proceeded to inspect the facility.

Satellite Accumulation Areas/90 Day Areas

(b) (7)(C), (b) (6) and (b) (7)(C), (b) (6) accompanied the inspectors to established satellite accumulation areas as follows:

Satellite Area ID Number	Location Description	Waste Stream Description	Closed/at or near/labeled/good condition
Accumulation area, Longmont 1	East wall of Regulated Area (R.A.)	1 Contaminated wood 1 Broken Glass 1 PPE 1 Wash Water 1 Cadmium Compounds 1 Copper Chloride 1 IPA	The SAA in this location were not reviewed during this inspection
Accumulation area, Longmont 2	Mechanical Room	1 Cadmium Contaminated used oil	In Compliance In Compliance
Accumulation area, Longmont 3	Personal Decon Room 1	1 Cadmium Contaminated PPE	In Compliance
Accumulation area, Longmont 4	Personal Decon Room 2	1 Cadmium Contaminated PPE	In Compliance
Accumulation area, Longmont 5	Glass Polish	1 Cadmium Contaminated Broken Glass 1 Cadmium Contaminated PPE 1 Cadmium Contaminated Water	In Compliance In Compliance In Compliance

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Accumulation area, Longmont 6	Equipment Decon Room (D1)	1 Cadmium Contaminated Broken Glass 1 Cadmium Contaminated PPE	In Compliance In Compliance
Accumulation area, Longmont 7	Equipment Decon Room (D2)	1 Cadmium Contaminated Broken Glass 1 Cadmium Contaminated PPE	In Compliance In Compliance
Accumulation area, Longmont 8	Dek Tak	1 Cadmium Contaminated Broken Glass 1 Cadmium Contaminated PPE	In Compliance In Compliance
Accumulation area, Longmont 9	P2 Scribe	1 Cadmium Contaminated Broken Glass 1 Cadmium Contaminated Filters Hazardous solid	In Compliance In Compliance
Accumulation area, Longmont 10	PVD/Sputter	1 Cadmium Contaminated Broken Glass 1 Flammable Wipes Hazardous solid	In Compliance In Compliance
Accumulation area, Longmont 11	Cell 10	1 Flammable Wipes Hazardous solid	In Compliance
Accumulation area, Longmont 12	Cell 27	2 Flammable Wipes Hazardous solid	In Compliance
Accumulation area, Longmont 13	Mail Room	Universal waste batteries	In Compliance
90 Day Area ID Number	Location Description	Waste Stream Description	Closed/at or near/labeled/good condition
Accumulation area Longmont 90 Day Room	Equipment Decon Room (D2)	1 Cadmium Contaminated glass 1 Cadmium Contaminated PPE	In Compliance In Compliance
Longmont 90 Day Area	Compactor dock 2	Cadmium Contaminated PPE	In Compliance
Longmont 90 Day Area	Longmont East Wall Shipping	4 Cadmium Contaminated PPE 2 Cadmium Contaminated filters 1 Cadmium Contaminated Broken Glass 2 Cadmium Compounds 1 Lab Pack Box 1 Flammable Wipes 1 Cadmium Contaminated water 1 Used Oil	In Compliance In Compliance In Compliance In Compliance In Compliance In Compliance In Compliance In Compliance

All SAA containers were closed; in good condition; labeled with the words "Hazardous Waste"; located at or near the point of generation; and inspected weekly.

It was brought to the attention of facility personnel that the aisle space in 90-day area #3 could be increased. (b) (7)(C), (b) (6) and (b) (7)(C), (b) (6) stated that they would increase the aisle space immediately in order to insure that a drum dolly can more easily fit between the rows.

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Hazardous Materials and Waste Management Division
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Used Oil:

- The facility had one 55-gallon drum of used oil stored in 90-day Accumulation Area #3 and one 55-gallon container of used oil used in the Mechanical Room. The containers were in good condition and properly marked or labeled with the words "Used Oil."

Universal Waste

- Aerosol Cans
 - This facility does not generate aerosol cans.
- Florescent Bulbs
 - On the day of the inspection the facility there were no universal waste fluorescent bulbs on site. When generated, they are disposed through Clean Harbors.
- CRTs/Circuit Boards/Monitors
 - No computer equipment or other related wastes have been generated at the facility to date.
- Pesticides
 - Weed control is contracted out to a professional, licensed, pesticide application company.
- Mercury-containing Devices
 - This facility does not generate mercury-containing devices.
- Batteries
 - Batteries are disposed through Clean Harbors

Fire Protection Equipment

The inspectors noticed fire extinguishers located throughout the plant. One random fire extinguisher in the front end glass handling area was reviewed during the inspection.

- The extinguisher was not blocked by equipment, coats or other objects that could interfere with access in an emergency.
- The pressure was at the recommended level. (The needle on the gauge was in the green zone.)
- The nozzle or other parts were not hindered in any way.
- The pin was intact.
- There were no dents, leaks, rust, chemical deposits or other signs of abuse/wear.
- The last service date was punched as February 2010.

Hazardous waste treatment:

The facility is performing treatment (compaction) of hazardous waste rags under a state RCRA permit (Permit By Rule). The following conditions were being met:

- The rags are compacted in a container.
- The rags are being compacted (treated) to reduce their volume.
- The facility complies with the accumulation containers requirements.
- The facility develops and maintains onsite a written waste analysis plan (WAP).

Wastewater treatment unit/discharge permit: Abound Solar plans to operate a wastewater treatment unit prior to discharge to the POTW. The unit is not yet functional.

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
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DOCUMENT REVIEW

The following documents associated with the management of hazardous waste were reviewed at the time of this inspection:

- Training records for personnel involved with the management of hazardous waste. There were no issues identified in the review of this documentation.
- The most current version of the Abound Solar contingency plan. There were no issues identified in the review of this document.
- The 2009 Biennial Report. Since the report was reviewed in the March 2010 inspection, it was not reviewed during this inspection.
- Land Disposal Restriction (LDR) notification forms.
 - There were no issues identified for enforcement action.
- Hazardous waste manifests for March 2010 through present. There were no issues identified in the review of these documents.
- Waste Analysis Plan (WAP). The WAP for the compaction of rags under Permit by Rule was reviewed. There were no issues identified in the review of this document.

COVERAGE AREAS

General Requirements (262.10 – 262.12). No violations were observed during this inspection.

Manifest Requirements (262.20 – 262.23). No violations were observed during this inspection.

Land Disposal Restriction Requirements (262.7(a)(2)). No violations were observed during this inspection.

Pre-Transport Requirements (262.30 – 262.34). The following pre-transport requirements were evaluated during this inspection:

- On-Site accumulation time limit (262.34(a)). No violations were observed during this inspection.
- Marking accumulation containers with the words "Hazardous Waste" (262.34(a)(3)). No violations were observed during this inspection.
- Marking accumulation containers with an accumulation start date (262.34(a)(2)). No violations were observed during this inspection.

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South, Mail Code: HMWMD-CP-B2, Denver, Co 80246-1530
(303) 692-3300

Notice of Inspection

Facility Name <u>Abound Solar, Inc</u>		EPA I.D.# <u>COR000220137</u>		Date <u>2/3/11</u>
Street <u>9586 E. I-25 Frontage Rd</u>		Inspection Arranged Prior to Inspection <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Hour In: <u>8:10 A.M.</u>
City <u>Longmont</u>	County <u>Weld</u>	Zip <u>80504</u>	Enter By <input checked="" type="checkbox"/> Consent <input type="checkbox"/> Warrant	Hour Out: <u>11:15 PM</u>
Facility Representatives <u>(b) (7)(C), (b) (6)</u>		Titles <u>EH&S Mgr</u>		Telephone # <u>(b) (7)(C), (b) (6)</u>
Agency <input checked="" type="checkbox"/> State <input type="checkbox"/> Oversight <input type="checkbox"/> Joint				
CURRENT NOTIFICATION(S) <input checked="" type="checkbox"/> LQG, <input type="checkbox"/> SQG, <input type="checkbox"/> Exempt, <input type="checkbox"/> LDF, <input type="checkbox"/> TSF, <input type="checkbox"/> Transporter, <input type="checkbox"/> Non-Notifier, <input type="checkbox"/> Transfer facility or <input type="checkbox"/> Other To Change Status; Facility must send Letter or Revised Notification.				

Comments:

A Compliance Evaluation Inspection was conducted on 2/3/11. Ensure aisle space is increased in the 90-day area located at the Longmont East Wall Shipping area.

No Violations were observed.

Assistance Delivered During Inspection (for internal use - check ALL that apply):

Compliance Assistance:	Pollution Prevention:	Current Waste Minimization:
<input type="checkbox"/> Generator Handbook	<input type="checkbox"/> Guidance/Referral	<input type="checkbox"/> Product Substitution
<input type="checkbox"/> Other guidance documents	<input type="checkbox"/> Field Assistance	<input type="checkbox"/> Distillation of solvents on site
<input type="checkbox"/> Change in generator status <input type="checkbox"/> downward <input type="checkbox"/> upward		<input type="checkbox"/> Elementary Neutralization
		<input type="checkbox"/> Other

Samples, Documents, Plans, and / or Photos Collected	3.
1.	
2.	4.

State personnel will review the facts established by this inspection. A final determination of your facility's compliance with State Regulations will be made as a result of this review. The review may reveal additional violations.

Receipt of this Notice of Inspection Form is Acknowledged

<u>(b) (7)(C), (b) (6)</u>	Lead Inspector <u>(b) (7)(C), (b) (6)</u>
	Assisting Inspector(s) and Multimedia Participant(s) <u>(b) (7)(C), (b) (6)</u>
	<u>(b) (7)(C), (b) (6)</u>
Signature of Facility Representative	

STATE OF COLORADO

(b) (7)(C), Governor

(b) (7)(C), (b) (6) Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
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Denver, Colorado 80230-6928
(303) 692-3090

<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

April 13, 2010

(b) (7)(C), (b) (6)

EHS SPECIALIST
ABOUND SOLAR INC
9586 I-25 E FRONTAGE RD
LONGMONT CO 80504

RE: Notification of Hazardous Waste Activity
ABOUND SOLAR INC - EPA ID #: COR000220137

This letter will serve to inform you that the Hazardous Materials & Waste Management Division, Colorado Department of Health and Environment has received correspondence notifying us of the changes to your company/facility as indicated below. This is an acknowledgement letter only; keep it for your files. The areas listed below have changed per your request..

- UPDATE FACILITY MAILING ADDRESS
- UPDATE FACILITY CONTACT TO: PETE GANISON
- UPDATE LEGAL OWNER INFORMATION
- UPDATE FACILITIES WASTE CODES TO: D001, D006

Any change in location would require a new Notification of Hazardous Waste Activity (EPA Form 8700-12) to be filed, as EPA ID numbers are location specific. Failure to have an EPA ID number for a new location or use of the wrong EPA ID number in shipping hazardous wastes may result in Enforcement Action under the Colorado Hazardous Waste Act (Sections 25-15-308 through 310, C.R.S.). In accordance with Part 99 of the Regulations, this office must be notified in writing at the above address if any of the following changes occur: 1) mailing address; 2) name of facility; 3) generator status or other notified activity; 4) contact name or phone number; 5) ownership; or 6) site is closed.

Please be aware that the handling and management of hazardous waste, including the generation, transportation, treatment, storage, and disposal of hazardous waste, is regulated under the Colorado Hazardous Waste Regulations (6 CCR 1007-3) Part 260 through 268; Part 2, 99 and 100. A copy of the *Guide to Generator Requirements of the Colorado Hazardous Waste Regulations* and copy of the regulations (6 CCR 1007-3) is available online at <http://www.cdphe.state.co.us/regulations/hazwaste/index.html>.

If you have any questions, or need further information, please contact me at (b) (7)(C), (b) (6)

Sincerely,

(b) (7)(C), (b) (6)

Hazardous waste Notification Coordinator

STATE OF COLORADO

(b) (7)(C), Governor
(b) (7)(C), (b) (6) Executive Director

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Located in Glendale, Colorado
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Colorado Department
of Public Health
and Environment

March 25, 2010

(b) (7)(C), (b) Environmental Health and Safety Consultant
(6)
Abound Solar
9586 I-25 East Frontage Road
Longmont, CO 80504

RE: Inspection Report for the March 2, 2010 Compliance Inspection
EPA ID Number COR000220137

On March 2, 2010 I conducted a compliance evaluation inspection at Abound Solar. This routine inspection was conducted to evaluate your compliance with the Colorado Hazardous Waste Regulations (6 CCR 1007-3). Based upon our observations at the time of that inspection, a Compliance Advisory was issued.

I received your written response to the Compliance Advisory on March 25, 2010. Based upon my review of your response, the Division is hereby closing the referenced Compliance Advisory and does not intend to take further action on this matter.

Please feel free to contact me at (b) (7)(C), (b) (6) if you have any questions regarding this matter.

Sincerely,

(b) (7)(C), (b) (6)

Hazardous Waste Compliance Unit

STATE OF COLORADO

(b) (7)(C), Governor
(b) (7)(C), (b) (6) Executive Director

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Colorado Department
of Public Health
and Environment

March 4, 2010

(b) (7)(C), (b) (6) Environmental Health and Safety Engineer

Abound Solar
9586 I-25 East Frontage Road
Longmont, CO 80504

**Subject: Inspection Report for the March 2, 2010, Compliance Inspection and
Complaint Inspection
EPA Identification Number COR000220137**

Dear (b) (7)(C), (b) (6)

On March 2, 2010, inspectors from the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) conducted a hazardous waste compliance inspection and a complaint inspection at Abound Solar. Based upon observations made at the time of that inspection, a Compliance Advisory was issued for deficiencies with the Colorado Hazardous Waste Regulations. Please submit a written response to the Compliance Advisory no later than April 2, 2010.

For your information, I have attached a copy of the inspection report for the referenced compliance inspection. Please contact me at (b) (6), (b) (7)(C) if you have any questions regarding this matter.

Sincerely,

(b) (7)(C), (b) (6)

(b) (7)(C), (b) (6) Compliance/Enforcement Officer
Hazardous Waste Compliance Unit

Copies to:

(b) (7)(C), (b) (6) EPA
Case File

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Hazardous Waste Inspection Report
for a
Large Quantity Generator



ABOUT SOLAR



GENERAL INFORMATION

Facility: Abound Solar

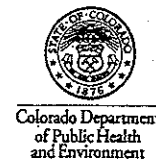
Facility Address: 9586 I-25 East Frontage Road, Longmont, Weld County, CO 80504

EPA ID Number: COR000220137

Notification: Large Quantity Generator

**Compliance Evaluation Inspection/Complaint Inspection
March 2, 2010**

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Hazardous Waste Inspection Report
for a
Large Quantity Generator



PREARRANGED: Yes	TIME IN: 8:45 am	TIME OUT: 1:30 pm
FACILITY CONTACT & TITLE (b) (7)(C), (b) (6) Environmental Health and Safety Engineer		
PARTICIPANTS: (b) (7)(C), (b) (6) Compliance Inspector, Colorado Department of Public Health and Environment (b) (7)(C), (b) (6), Unit Leader/ Enforcement Unit, Colorado Department of Public Health and Environment (b) (7)(C), (b) (6) Environmental Health and Safety Engineer, Abound Solar (b) (7)(C), (b) (6) Environmental Health and Safety Specialist, Abound Solar		
FACILITY PHONE NUMBER: (303) 682-6118		
PRODUCT OR SERVICE: This facility manufactures solar panels.		
FACILITY START DATE: The facility started in 2007 in Fort Collins, Colorado. It has been at this Longmont location under the name AVA Solar since 2008. The facility changed its name to Abound Solar in April 2009.		NUMBER OF EMPLOYEES: There are 150 employees at this facility working four shifts. The facility operates 24 hours a day, seven days a week.

Results of Previous Inspections

This is the first inspection at this facility.

FACILITY INSPECTION

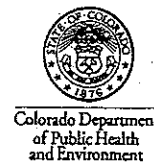
Inspection Access

On the morning of March 2, 2010 (b) (7)(C), (b) (6) and (b) (7)(C), (b) (6) from the Colorado Department of Public Health and Environment (the Department), Hazardous Materials and Waste Management Division conducted an announced compliance evaluation inspection at Abound Solar to determine compliance with the Colorado Hazardous Waste Regulations (6 CCR 1007-3).

After scheduling, but prior to the inspection, the Department received an anonymous complaint alleging cadmium-contaminated solar panels may have been shipped to customers due to a filter problem. The inspectors investigated this allegation at the same time as the routine compliance evaluation inspection.

Upon arrival at the facility, the inspectors were introduced to (b) (7)(C), (b) (6) Environmental Health and Safety Engineer and (b) (6), (b) (7)(C) Environmental Health and Safety Specialist from Abound Solar. The inspectors were escorted to a conference room where the inspectors presented their credentials and held an opening conference.

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Hazardous Waste Inspection Report
for a
Large Quantity Generator



Facility

According to (b) (7)(C), (b) (6) Abound Solar began in 2007 as the brain-child of scientists at Colorado State University in Fort Collins, CO. Until April 2009 Abound Solar was known as AVA Solar. The facility, which has operated from this location since 2008, provides a continuous, automated manufacturing process for solar panels using glass coating with a cadmium telluride thin film.

Manufacturing Processes

Abound Solar manufactures thin-film modules utilizing an automated, dry deposition process. Due to the proprietary nature of the technologies used at this facility, processes will not be discussed in this report. Additionally, no pictures were taken at the facility during this inspection.

Hazardous Waste Streams

The following hazardous waste streams and associated waste codes were identified during the inspection of this facility:

1. Broken glass – D006
2. Personal Protective Equipment (PPE) – D006
3. Rinse Waters – D006
 - Facility personnel stated that the waste water does not exhibit the toxicity characteristic for cadmium using the toxicity characteristic leaching procedure (TCLP) method 1311. However, because they have not yet installed their planned wastewater treatment unit, and the rinse water must have the metals precipitated out prior to disposal in the publicly owned treatment works (POTW), they have chosen to dispose of the rinse water as hazardous waste at this time.
4. Rags – D001
 - Facility personnel stated that, although the rags are not hazardous waste (they are not capable of spontaneous ignition, and if ignited they would not burn vigorously and persistently) they are conservatively being managed and disposed of as hazardous waste, nonetheless.

All hazardous waste is disposed of off-site at Clean Harbors in Deer Trail, Colorado, which is a permitted Treatment, Storage and Disposal Facility (TSDF).

Complaint Investigation

As previously stated, after scheduling the inspection, but prior to arrival, the Department received an anonymous complaint alleging cadmium-contaminated solar panels may have been shipped to customers due to a filter problem. Facility personnel stated that on January 1, 2010 the housing unit for a rinse water filter caught on fire causing the filter to drop out of the housing. However, (b) (7)(C), (b) (6) stated that the line was immediately and automatically shut down preventing units from progressing through the system until the filter and its

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Hazardous Waste Inspection Report
for a
Large Quantity Generator



housing were replaced. The incident was minor and did not require the facility contingency plan to be implemented. The inspectors did not find evidence to substantiate the allegations of the complainant.

Publicly Owned Treatment Works (POTW)

The POTW is Saint Vrain Sanitation District. Wastewater from rinsing operations are planned to be discharged to the POTW as soon as their wastewater treatment unit is installed.

Air Pollutant Emission Notice

The Construction Permit Unit of the Air Pollution Prevention Division at the Department issues construction permits, also known as air pollutant emissions notices (APENs) to commercial and industrial air pollution sources in Colorado in order to ensure compliance with air quality regulations. The regulations are designed to protect the public's health and welfare and to maintain ambient air quality standards. Abound Solar has obtained an APEN number, notifying as a minor source of air pollution.

Emergency Response Coordinator

The Emergency Response Coordinator for the facility is (b) (7)(C), (b) (6) with (b) (7)(C), (b) (6) acting as an alternate.

Current generator status:

This facility operates as a large quantity generator of hazardous waste.

Hazardous Waste Accumulation Areas (SAA)

Accompanied by (b) (7)(C), (b) (6) and (b) (7)(C), (b) (6) the inspectors proceeded to inspect the entire facility.

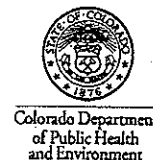
Satellite Accumulation Areas

(b) (7)(C), (b) (6) and (b) (7) accompanied the inspectors to established satellite accumulation areas as follows:

- The east wall of the Regulated Room
- Personal Decon Room #1
- Personal Decon Room #2
- Overspray Removal Aarea
- Equipment Decon Room #1
- Lab
- Backend/Production Line

All SAA containers were 55-gallon, closed drums in good condition; labeled with the words "Hazardous Waste"; located at or near the point of generation; and inspected weekly.

Colorado Department of Public Health and Environment
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SPECIAL NOTE: (b) (7)(C), (b) (6) Unit Leader of the Compliance Enforcement Unit has authorized the facility to establish SAA containers located in the overspray removal area and the backend/production line area as roving satellites in order to accommodate the facility's unique need to move the SAAs up and down the line for the satellite storage of broken glass (D006).

90-day Accumulation Area

(b) (7)(C), (b) (6) and (b) (7)(C), (b) (6) accompanied the inspectors to the following 90-day area:

- Equipment Decon Room #2
 - One cubic yard box of personal protective equipment (PPE) in the 90-day accumulation area was not labeled with the words "Hazardous Waste" and did not have an accumulation start date. Facility personnel corrected these deficiencies at the time of the inspection.

Tanks

At the time of the inspection the facility had one 500-gallon tank in the Mechanical Room. Another 2,000-gallon tank is planned for the near future. According to (b) (7)(C), (b) (6) the 500-gallon tank was empty but is currently being used to store non-hazardous rinse water prior to shipping and disposing of the rinse water as hazardous waste. The tank was not labeled with the words "Hazardous Waste" and did not have an accumulation start date. Since the rinse water is being disposed of as hazardous waste until the facility installs their wastewater treatment unit, the inspectors advised that the facility either ship the rinse water as non-hazardous waste or, if they choose to continue to ship and dispose of the rinse waters as hazardous waste, then they should manage the tank as a hazardous waste tank, complying with the requirements of Subpart J.

Universal Waste

On the day of the inspection the facility was not yet generating universal waste.

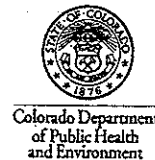
Used Oil:

On the day of this inspection, the facility was generating used oil and storing the used oil in a container in the Mechanical Room. The container was not properly marked or labeled with the words "Used Oil." Facility personnel corrected this deficiency at the time of the inspection.

Hazardous waste treatment: On the day of this inspection, Abound Solar was not conducting generator treatment or land disposal restriction (LDR) treatment of hazardous waste. However, (b) (7)(C), (b) (6) stated that they plan to install a compaction unit for hazardous waste rags. The inspectors explained to (b) (7)(C), (b) (6) that A generator performing on-site compaction (treatment) of its own waste shall be considered to have a state RCRA permit (Permit By Rule) if the following conditions are met:

- The rags are compacted in a container.
- The rags are being compacted (treated) to reduce their volume.
- The facility complies with the accumulation containers requirements.
- The facility develops and maintains onsite a written waste analysis plan (WAP).

Colorado Department of Public Health and Environment
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Wastewater treatment unit/discharge permit: Abound Solar plans to operate a wastewater treatment unit prior to discharge to the POTW. The facility has not yet installed the unit.

DOCUMENT REVIEW

The following documents associated with the management of hazardous waste were reviewed at the time of this inspection:

- Training records for personnel involved with the management of hazardous waste.
 - The facility did not ensure a person trained in hazardous waste management was conducting the training. Both (b) (7)(C), (b) (6) and (b) (7)(C), (b) (6) require additional hazardous waste training.
- The most current version of the Abound Solar contingency plan.
 - Although all the elements required in the contingency plan were eventually found, the required plan information was not readily or easily available. There were no issues identified in the review of this document. However, the inspectors strongly recommend utilizing the Department's contingency plan template or otherwise organizing the contingency plan.
- The 2009 Biennial Report. There were no issues identified in the review of this document.
- Land disposal restriction (LDR) notification forms.
 - There were no issues identified for enforcement action. However, the inspectors recommended the facility consider filing an LDR for each waste stream going to each treatment, storage and disposal facility (TSDF) to eliminate inconsistencies in LDR forms attached to each manifest.
- Hazardous waste manifests for January 2008 through present. There were no issues identified in the review of these documents.

COVERAGE AREAS

General Requirements (262.10 – 262.12). No violations were observed during this inspection.

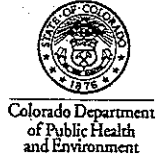
Manifest Requirements (262.20 – 262.23). No violations were observed during this inspection.

Land Disposal Restriction Requirements (262.7(a)(2)). No violations were observed during this inspection.

Pre-Transport Requirements (262.30 – 262.34). The following pre-transport requirements were evaluated during this inspection:

- On-Site accumulation time limit (262.34(a)). No violations were observed during this inspection.

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- Marking accumulation containers with the words "Hazardous Waste" (262.34(a)(3)).
 - One cubic yard box of PPE in the 90-day accumulation area was not labeled with the words "Hazardous Waste." Facility personnel corrected this deficiency at the time of the inspection.
- Marking accumulation containers with an accumulation start date (262.34(a)(2)).
 - One cubic yard box of PPE in the 90-day accumulation area did not have an accumulation start date. Facility personnel corrected this deficiency at the time of the inspection.
- Management of 90-day accumulation containers (262.34(a)(1)(i) and 265.171 – 178). No violations were observed during this inspection.
- Management of satellite accumulation containers (262.34(c)(1)(i) and 265.171 – 178). No violations were observed during this inspection.
- Contingency plan (262.34(a)(4) and 265.52). No violations were observed during this inspection.
- Training (262.34(a)(4) and 265.16).
 - The facility did not ensure a person trained in hazardous waste management was conducting the training. Both (b) (7)(C), (b) (6) and (b) (7)(C), (b) (6) require additional hazardous waste training.
- Preparedness and prevention (262.34(a)(4) and Part 265, Subpart C). No violations were observed during this inspection.

Subpart D, Recordkeeping and Reporting (262.40 – 262.44). No violations were observed during this inspection.

OTHER COVERAGE AREAS

Permit Requirements (Part 100). No violations were observed during this inspection.

Land Disposal Restrictions (Part 268). No violations were observed during this inspection.

Used Oil (Part 279).

On the day of this inspection, the facility was generating used oil and storing the used oil in a container in the Mechanical Room. The container was not properly marked or labeled with the words "Used Oil." Facility personnel corrected this deficiency at the time of the inspection.

Colorado Department of Public Health and Environment
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COMPLIANCE ASSISTANCE/CLOSE-OUT MEETING

The inspectors conducted a closeout conference with facility personnel prior to leaving the facility. At the closeout meeting, the inspectors provided facility personnel with verbal information on the Colorado Hazardous Waste Regulations and a copy of the Division's *Guide to Generator Requirements of the Colorado Hazardous Waste Regulations* and several additional guidance documents.

The inspectors completed a Notice of Inspection (Attachment #1) and a Compliance Advisory (Attachment #2) that were signed by (b) (7)(C), (b) (6) prior to leaving the facility. (b) (7)(C), (b) (6) was provided with a copy of the documents.

Prepared by (b) (7)(C), (b) (6) LOCK
Date 3/3/10

Reviewed by (b) (7)(C), (b) (6) 3/4/10
Date

ATTACHMENTS

1. Notice of Inspection
2. Compliance Advisory

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South, Mail Code: HMWMD-CP-B2, Denver, Co 80246-1530
(303) 692-3300

Notice of Inspection

Facility Name <u>Abound Solar, Inc.</u>		EPA I.D.# <u>COR000220137</u>	Date <u>3/2/10</u>
Street <u>9586 E. 1-25 Vintage Rd.</u>		Inspection Arranged Prior to Inspection (<input checked="" type="checkbox"/>) YES () NO	Hour In: <u>9:00</u>
City <u>Longmont</u>	County <u>Weld</u>	Zip <u>80504</u>	Enter By: (<input checked="" type="checkbox"/>) Consent () Warrant
Facility Representatives <u>(b) (7)(C), (b) (6)</u>		Titles <u>EHS Manager</u>	Telephone # <u>303-682-6118</u>
CURRENT NOTIFICATION(S) <input checked="" type="checkbox"/> LQG, <input type="checkbox"/> SQG, <input type="checkbox"/> Exempt, <input type="checkbox"/> LDF, <input type="checkbox"/> TSF, <input type="checkbox"/> Transporter, <input type="checkbox"/> Non-Notifier, <input type="checkbox"/> Transfer facility or <input type="checkbox"/> Other		Agency: (<input checked="" type="checkbox"/>) State () Oversight () Joint	
To Change Status; Facility must send Letter or Revised Notification.			

Comments:

A combination complaint inspection and compliance evaluation inspection was conducted on 3/2/10.

See Compliance Advisory.

Assistance Delivered During Inspection (for internal use - check ALL that apply):

Compliance Assistance: <input checked="" type="checkbox"/> Generator Handbook <input checked="" type="checkbox"/> Other guidance documents <input type="checkbox"/> Change in generator status <input type="checkbox"/> downward <input type="checkbox"/> upward	<input checked="" type="checkbox"/> Field Assistance <input type="checkbox"/> Referral to another program	Pollution Prevention: <input type="checkbox"/> Guidance/Referral <input type="checkbox"/> Field Assistance	Current Waste Minimization <input type="checkbox"/> Product Substitution <input type="checkbox"/> Distillation of solvents on site <input type="checkbox"/> Elementary Neutralization <input type="checkbox"/> Other
--	--	---	---

Samples, Documents, Plans, and / or Photos Collected	3.
1. <u>No photos taken</u>	
2. <u>No copies taken</u>	4.

State personnel will review the facts established by this inspection. A final determination of your facility's compliance with State Regulations will be made as a result of this review. The review may reveal additional violations.

Receipt of this Notice of Inspection Form is Acknowledged

(b) (7)(C), (b) (6)

Lead Inspector

(b) (7)(C), (b) (6)

Assisting Inspector(s) and Multimedia Participant(s)

(b) (7)(C), (b) (6)

Signature of Facility Representative

COMPLIANCE ADVISORY

Page 2 of 22

FACILITY: Abound Solar Inc	EPA ID#: COR 00 0220 137	DATE: 3/2/10
-------------------------------	-----------------------------	-----------------

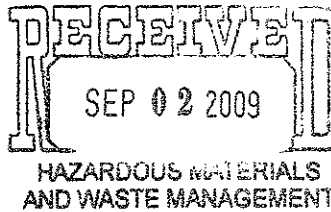
DEFICIENCIES, POTENTIAL DEFICIENCIES OR CONCERNS NOTED

- 1) Ensure 90-day storage ~~area~~ ^{container} of PPE is marked with the words "Hazardous Waste."
6 CCR 1007-3, section 262.34(a)(3)
 - 2) Ensure an accumulation start date is clearly marked on the 90-day storage container of PPE.
6 CCR 1007-3, section 262.34(a)(2)
 - 3) Ensure all containers of used oil are marked with the words "Used Oil," 6 CCR 1007-3, section 279
 - 4) Ensure a person trained in haz waste management conducts the haz waste training program
6 CCR 1007-3, sec 262.34(a)(4) + 265.16(a)
 - 5) Ensure personnel are trained within 6 mos of new or changed employment.
 - 6) Ensure each employee position has a job title, name of person filling position, and written job description, education and duties.
6 CCR 1007-3, section 265.16(a)(b) + (c)
- ~~##~~ Please respond by 4/2/2010 (in writing)
~~SEE NEXT PAGE~~

I acknowledge that the "Deficiencies and "Potential Deficiencies" listed above have been identified for me and I have been advised to contact the above-listed Compliance Officer to close out this Compliance Advisory. I have also been advised that failure to respond in a timely fashion to this Compliance Advisory will be considered in the issuance of any subsequent enforcement action and the assessment of greater administrative and/or civil penalties.

(b) (7)(C), (b) (6)

Facility Representative



9586 East I-25 Frontage Road
Longmont, CO 80504
Phone: (303) 682-6100
Fax: (303) 682-6101

April 31st, 2009

Attn: (b) (7)(C), (b) (6)

Notification Coordinator

Colorado Department of Public Health and Environment

Hazardous Materials and Waste Management Division

4300 Cherry Creek Drive South

Denver, CO 80246-1530

RE: Annual Small Quantity Generator Self-Certification (EPA ID# - COR000220137)

In April of 2009, we changed our status from Small Quantity Generator Status to Large Quantity Generator Status. Due to this status change we are not completing the 2009 Annual Small Quantity Generator Self-Certification.

Please feel free to contact me if you should have any questions.

Best Regards,

(b) (7)(C), (b) (6)

EHS Manager
ABOUND SOLAR, INC.

STATE OF COLORADO

(b) (7)(C), Governor
(b) (7)(C), (b) Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

May 18, 2009

(b) (7)(C), (b) (6)

ABOUND SOLAR INC
4557 DENROSE CT UNIT B
FT COLLINS CO 80524

RE: Notification of Hazardous Waste Activity
ABOUND SOLAR INC - EPA ID #: COR000220137

This letter will serve to inform you that the Hazardous Materials & Waste Management Division, Colorado Department of Health and Environment has received correspondence notifying us of the changes to your company/facility as indicated below. This is an acknowledgement letter only; keep it for your files. The areas listed below have changed per your request..

- UPDATE GENERATOR STATUS TO: LARGE QUANTITY GENERATOR (LQG) FROM: SMALL QUANTITY GENERATOR (SQG)
- UPDATE FACILITY NAME TO: ABOUND SOLAR INC
- UPDATE FACILITY CONTACT TO: (b) (7)(C), (b) (6)

Any change in location would require a new Notification of Hazardous Waste Activity (EPA Form 8700-12) to be filed, as EPA ID numbers are location specific. Failure to have an EPA ID number for a new location or use of the wrong EPA ID number in shipping hazardous wastes may result in Enforcement Action under the Colorado Hazardous Waste Act (Sections 25-15-308 through 310, C.R.S.). In accordance with Part 99 of the Regulations, this office must be notified in writing at the above address if any of the following changes occur: 1) mailing address; 2) name of facility; 3) generator status or other notified activity; 4) contact name or phone number; 5) ownership; or 6) site is closed.

Please be aware that the handling and management of hazardous waste, including the generation, transportation, treatment, storage, and disposal of hazardous waste, is regulated under the Colorado Hazardous Waste Regulations (6 CCR 1007-3) Part 260 through 268; Part 2, 99 and 100. A copy of the *Guide to Generator Requirements of the Colorado Hazardous Waste Regulations* and copy of the regulations (6 CCR 1007-3) is available online at <http://www.cdphe.state.co.us/regulations/hazwaste/index.html>.

If you have any questions, or need further information, please contact me at (b) (7)(C), (b) (6)

Sincerely,

(b) (7)(C), (b) (6)

Hazardous Waste Notification Coordinator

Paid \$100



Colorado Department
of Public Health
and Environment

MAIL FORM TO:
CDPHE
HMWMD-B2
4300 Cherry Creek Dr. S.
Denver, CO 80246-1530

COLORADO HAZARDOUS WASTE NOTIFICATION FORM

Replaces EPA Form 8700-12, 8700-13A/B, and Page 1 of 8700-23

1. Reason for Submittal: (Mark 'X' in the appropriate boxes)

- ☐ Initial notification and obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities.
- ☒ Subsequent notification to update information (Sec. 2-6 and 10 must be completed).
- ☐ Initial RCRA Hazardous Waste Part A Permit Application (Page 3-7 of 8700-23 must also be submitted).
- ☐ Component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____).
- ☐ Component of a biennial Hazardous Waste Report and a subsequent notification.

RECEIVED
APR 30 2009

2. Site EPA ID Number: 00R000220137

3. Site Legal Name/Operator: Abound Solar, Inc.

4. Site Location Information: County Name: Weld

Street Address: 9586 I-25 Frontage Road

City or Town: Longmont State: CO Zip Code: 80501

5. Site Land Type: ☒ Private ☐ County ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other

6. North American Industry Classification System (NAICS) Code(s) for the Site: A. B. C.

7. Site Mailing Address Same as ☐ Location Street Address: 4557 Denrose Court, Unit B

City or Town: Fort Collins State: CO Zip Code: 80524

8. Site Contact Person First Name: (b) (7) MI: Last Name: (b) (7)(C).

Job Title: CFO Phone Number: (b) (6), (b) (7)(C) Extension:

Address same as ☐ Location ☒ Mailing
Street Address:

City or Town: State: Zip Code:

9. Name of Site's Owner: First Industrial Development Services Phone Number:

Address same as ☐ Location ☐ Mailing ☐ Contact
Owners Street Address: 5350 S Roslyn No. 240

City or Town: Englewood State: CO Zip Code: 80111

Owner Type: ☒ Private ☐ County ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other

10. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes for all activities in Sections 10A, 10B, and 10C).

A. Hazardous Waste Activities For Items 2 through 7, check all that apply:

1. Generator of Hazardous Waste (choose only one)

- ☒ a. LQG: Greater than 1,000 kg/mo (2,200 lbs.) of non-acute hazardous waste; or
- ☐ b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs.) of non-acute hazardous waste; or
- ☐ c. CESQG: Less than 100 kg/mo of non-acute hazardous waste

Indicate other activities (check all that apply)

- ☐ d. United States Importer of Hazardous Waste
- ☐ e. Mixed Waste (hazardous and radioactive) Generator

☐ 2. Transporter of Hazardous Waste

☐ 3. Hazardous Waste Transfer Facility

☐ 4. Treater, Storer, or Disposer of Hazardous Waste
Note: A hazardous waste permit is required for this activity.

☐ 5. Recycler of Hazardous Waste
Note: A hazardous waste permit may be required for this activity.

6. Exempt Boiler and/or Industrial Furnace
☐ a. Small Quantity On-site Burner Exemption
☐ b. Smelting, Melting, Refining Furnace Exemption

☐ 7. Underground Injection Control

B. Universal Waste Activities

1. **Large Quantity Handler of Universal Waste** Indicate types of universal waste generated and/or consolidated at your site. (check all boxes that apply):

	<u>Generate</u>	<u>Consolidate (from other Universal Waste Handlers)</u>
a. Batteries	<input type="checkbox"/>	<input type="checkbox"/>
b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>
c. Mercury-containing Devices	<input type="checkbox"/>	<input type="checkbox"/>
d. Lamps	<input type="checkbox"/>	<input type="checkbox"/>
e. Aerosol Cans	<input type="checkbox"/>	<input type="checkbox"/>
f. Electronic Devices and/or Components	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (specify in comments)	<input type="checkbox"/>	<input type="checkbox"/>

- ☐ 2. **Destination Facility for Universal Waste**

Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities (check all boxes that apply):

1. **Used Oil Transporter**

☐ a. Transporter

☐ b. Transfer Facility

2. **Used Oil Processor and/or Re-refiner**

☐ a. Processor

☐ b. Re-refiner

- ☐ 3. **Off-Specification Used Oil Burner**

☐ 5. **Used Oil Collection Center**

4. **Used Oil Fuel Marketer**

☐ a. Marketer Who Directs Shipment of Off-Spec. Used Oil to an Off-Spec. Used Oil Burner

☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

11. **Description of Hazardous Wastes** List waste codes of the hazardous wastes handled at your site. List in order presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if needed.

Ignitable (D001) ☐ Corrosive (D002) ☐ Reactive (D003) ☐ Toxic ☒ (List specific codes below)

D006												

12. Comments

Transfer of Business Name from AVA Solar, Inc. to Abound Solar, Inc.

13. **Certification.** I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of owner, operator, or an authorized representative

Name and Official Title (type or print)

Date Signed

(b) (7)(C), (b) (6)

(b) (7)(C), (b) (6) CFO

4/24/09



Stewart Environmental Consultants, Inc.
consulting engineers and scientists

Corporate Office & Laboratory:
3801 Automation Way, Suite 200
Fort Collins, Colorado 80525
ph: (970) 226-5500
fax: (970) 226-4946
www.stewartenv.com

April 7, 2009

Notification Coordinator
Colorado Department of Public Health and Environment
HMWMD-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Subject: Colorado Hazardous Waste Notification Form – Abound Solar, Inc., Longmont Facility
Project No.: 3973.011(2)

Dear Notification Coordinator:

This letter provides a summary and description of the activities requiring re-submittal of the Colorado Department of Public Health and Environment (CDPHE) Colorado Hazardous Waste Notification Form for Abound Solar, Inc. (formerly AVA Solar, Inc.) at 9586 I-25 Frontage Road in Longmont, Colorado.

AVA Solar has formally changed its business name to Abound Solar Inc. Stewart Environmental Consultants, Inc. has verified with Abound Solar that the production processes and waste generated as listed in the Initial CDPHE, Colorado Hazardous Waste Notification Form will not change.

The required sections of the CDPHE Colorado Hazardous Waste Notification Form are included with this document.

If you have any questions or require specific information, please contact Stewart Environmental.

Sincerely,

STEWART ENVIRONMENTAL CONSULTANTS, INC.

(b) (7)(C), (b) (6)

Environmental Health and Safety Manager

(b) (7)(C), (b) (6)

Environmental Services Manager

Enc.

ACEC
MEMBER

STATE OF COLORADO

(b) (7)(C), (b) Governor
(b) (7)(C), (b) Executive Director

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TDD Line (303) 691-7700 (303) 692-3090
Located in Glendale, Colorado

<http://www.cdphe.state.co.us>

October 14, 2008



Colorado Department
of Public Health
and Environment

(b) (7)(C), (b)
(b) Ava Solar

4557 Denrose Ct
Unit B
Fort Collins CO 80524

RE: Notification of Hazardous Waste Activity EPA ID Number: **COR000220137**

Dear (b) (7)(C), (b)
(b)

The Hazardous Materials & Waste Management Division of the Colorado Department of Public Health and Environment, has received a Notification of Hazardous Waste Activity (EPA Form 8700-12) by your company for the following location:

**9586 I-25 FRONTAGE RD
STE 200
LONGMONT CO 80501**

In accordance with state regulations, the EPA ID number listed above has been assigned to the following above referenced location: (Future correspondence should include this number.)

SMALL QUANTITY GENERATOR

Any change in location would require a new Notification of Hazardous Waste Activity (EPA Form 8700-12) to be filed, as EPA ID numbers are location specific. Failure to have an EPA ID number for a new location or use of the wrong EPA ID number in shipping hazardous wastes may result in Enforcement Action under the Colorado Hazardous Waste Act (Sections 25-15-308 through 310, C.R.S.). In accordance with Part 99 of the Regulations, if any of the following changes occur, this office must be notified in writing at the above address: 1) mailing address; 2) name of facility; 3) generator status or other notified activity; 4) contact name or phone number; 5) ownership; or 6) site is closed.


Please be aware that the handling and management of hazardous waste, including the generation, transportation, treatment, storage, and disposal of hazardous waste, is regulated under the Colorado Hazardous Waste Regulations (6 CCR 1007-3) Part 260 through 268; Part 2, 99 and 100. A copy of the *Guide to Generator Requirements of the Colorado Hazardous Waste Regulations* and a copy of the regulations (6 CCR 1007-3) are available online at <http://www.cdphe.state.co.us/regulations/hazwaste/index.html>.

If you have any questions, or need further information, please contact me at (303) 692-3461.

Sincerely,

(b) (7)(C), (b) (6)

Hazardous Waste Notification Coordinator

MAIL FORM TO: CDPHE HMWMD-B2 4300 Cherry Creek Dr. S. Denver, CO 80246-1530	COLORADO HAZARDOUS WASTE NOTIFICATION FORM Replaces EPA Form 8700-12, 8700-13A/B, and Page 1 of 8700-23	 RECEIVED AUG 26 2008 Colorado Department of Public Health and Environment
1. Reason for Submittal: (Mark 'X' in the appropriate boxes) <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Initial notification and obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities. <input type="checkbox"/> Subsequent notification to update information (Sec. 2-6 and 10 must be completed). <input type="checkbox"/> Initial RCRA Hazardous Waste Part A Permit Application (Page 3-7 of 8700-23 must also be submitted). <input type="checkbox"/> Component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____). <input type="checkbox"/> Component of a biennial Hazardous Waste Report and a subsequent notification. </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> HAZARDOUS MATERIALS AND WASTE MANAGEMENT </div> </div>		
2. Site EPA ID Number: COR000220137		
3. Site Legal Name/Operator: AVA SOLAR		
4. Site Location Information:		County Name: WELD
Street Address: 9586 1-25 FRONTAGE ROAD #200		
City or Town: LONGMONT	State: CO	Zip Code: 80501
5. Site Land Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
6. North American Industry Classification System (NAICS) Code(s) for the Site:	A. 334413	B. C.
7. Site Mailing Address Same as <input checked="" type="checkbox"/> Location Street Address:		
City or Town:	State:	Zip Code:
8. Site Contact Person First Name: (b) (7)(C), (b) (6)	MI:	Last Name: (b) (7)(C), (b) (6)
Job Title: VP OF MANUFACTURING	Phone Number: (b) (7)(C), (b) (6)	Extension: 168
Address same as <input checked="" type="checkbox"/> Location <input type="checkbox"/> Mailing Street Address:		
City or Town:	State:	Zip Code:
9. Name of Site's Owner: FIRST INDUSTRIAL		Phone Number: (720)528-7215
Address same as <input type="checkbox"/> Location <input type="checkbox"/> Mailing <input type="checkbox"/> Contact Owners Street Address: 5350 S. ROSLYN STREET, SUITE 240		
City or Town: GREENWOOD VILLAGE	State:	Zip Code: 80111
Owner Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
10. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes for all activities in Sections 10A, 10B, and 10C).		
A. Hazardous Waste Activities For Items 2 through 7, check all that apply:		
1. Generator of Hazardous Waste (choose only one)		
<input type="checkbox"/> a. LQG: Greater than 1,000 kg/mo (2,200 lbs.) of non-acute hazardous waste; or <input checked="" type="checkbox"/> b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs.) of non-acute hazardous waste; or <input type="checkbox"/> c. CESQG: Less than 100 kg/mo of non-acute hazardous waste	<input type="checkbox"/> 3. Hazardous Waste Transfer Facility <input type="checkbox"/> 4. Treater, Storer, or Disposer of Hazardous Waste Note: A hazardous waste permit is required for this activity. <input type="checkbox"/> 5. Recycler of Hazardous Waste Note: A hazardous waste permit may be required for this activity.	
Indicate other activities (check all that apply)		6. Exempt Boiler and/or Industrial Furnace
<input type="checkbox"/> d. United States Importer of Hazardous Waste <input type="checkbox"/> e. Mixed Waste (hazardous and radioactive) Generator	<input type="checkbox"/> a. Small Quantity On-site Burner Exemption <input type="checkbox"/> b. Smelting, Melting, Refining Furnace Exemption	
<input type="checkbox"/> 2. Transporter of Hazardous Waste	<input type="checkbox"/> 7. Underground Injection Control	

B. Universal Waste Activities

1. **Large Quantity Handler of Universal Waste** Indicate types of universal waste generated and/or consolidated at your site. (check all boxes that apply):

	<u>Generate</u>	<u>Consolidate (from other Universal Waste Handlers)</u>
a. Batteries	<input type="checkbox"/>	<input type="checkbox"/>
b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>
c. Mercury-containing Devices	<input type="checkbox"/>	<input type="checkbox"/>
d. Lamps	<input type="checkbox"/>	<input type="checkbox"/>
e. Aerosol Cans	<input type="checkbox"/>	<input type="checkbox"/>
f. Electronic Devices and/or Components	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (specify in comments)	<input type="checkbox"/>	<input type="checkbox"/>

- ☐ 2. **Destination Facility for Universal Waste** Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities (check all boxes that apply):

1. **Used Oil Transporter** ☐ a. Transporter ☐ b. Transfer Facility
2. **Used Oil Processor and/or Re-refiner** ☐ a. Processor ☐ b. Re-refiner
☐ 3. **Off-Specification Used Oil Burner** ☐ 5. **Used Oil Collection Center**
4. **Used Oil Fuel Marketer** ☐ a. Marketer Who Directs Shipment of Off-Spec. Used Oil to an Off-Spec. Used Oil Burner
☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

11. **Description of Hazardous Wastes** List waste codes of the hazardous wastes handled at your site. List in order presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if needed.

Ignitable (D001) ☒ Corrosive (D002) ☒ Reactive (D003) ☐ Toxic ☐ (List specific codes below)

D006	F003										

12. Comments

13. **Certification.** I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of owner, operator, or an

Name and Official Title (type or print)

Date Signed

(b) (7)(C), (b) (6)

8-08-08